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| Michael T. Davis  Pre-Calculus | | 1.6 Graphing Quadratic Functions In-Class & HW (1)  September 14-16, 2016 | |
| Name: | |

**Key Topics to Be Covered**

* Graphing quadratic functions (parabolas) in standard form 
* Graphing quadratic functions (parabolas) in vertex form 
* Graphing quadratic functions (parabolas) in factored form or x-intercept form
* Writing an equation of a parabola based on a graph
* Finding the zeros of a quadratic function, i.e, solving  or  or



* The coordinates of x-intercepts
* The coordinates of a y-intercept
* The minimum or maximum value of a quadratic function (the y-value at the vertex)
* The symmetry of a parabola, the axis (line) of symmetry and its equation 
* Twin points as equidistant to the axis of symmetry
* The vertex and its coordinates
* The concavity of a parabola

**Graphing Quadratic Functions in Standard Form** 



1. Graph the parabola with quadratic equation 
2. Graph the parabola with quadratic equation 
3. Graph the parabola with quadratic equation 



1. Graph the parabola with quadratic equation 
2. Graph the parabola with quadratic equation 



1. Graph the parabola with quadratic equation 



1. Graph the parabola with quadratic equation 
2. Graph the parabola with quadratic equation 

**Graphing Quadratic Functions in Vertex Form** 



1. Graph the parabola with quadratic equation 
2. Graph the parabola with quadratic equation 
3. Graph the parabola with quadratic equation 



1. Graph the parabola with quadratic equation 
2. Graph the parabola with quadratic equation 
3. Graph the parabola with quadratic equation

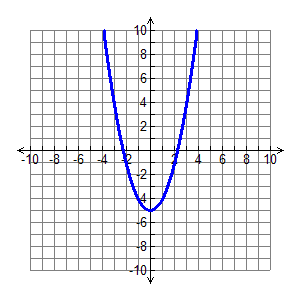
**Graphing Quadratic Functions in Factored Form or X-intercept Form** 

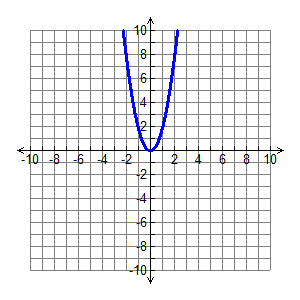


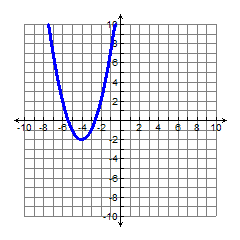
1. Graph the parabola with quadratic equation 

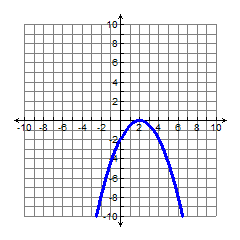


1. Graph the parabola with quadratic equation 
2. Graph the parabola with quadratic equation

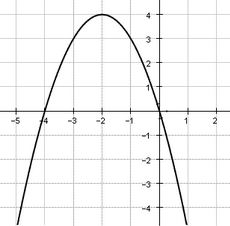
**Writing an Equation of a Parabola Based on a Graph**

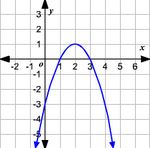
1. For the parabola, write a quadratic equation in standard form.
2. For the parabola, write a quadratic equation in standard form.

1. For the parabola shown, write a quadratic equation in vertex form.



1. For the parabola shown, write a quadratic equation in vertex form.



1. For the parabola shown, write a quadratic equation in factored form.
2. For the parabola shown, write a quadratic equation in factored form.